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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,499	07/14/2004	Stephen Norman Batchelor	C4195(C)	2529

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EXAMINER

KHAN, AMINA S

ART UNIT	PAPER NUMBER
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1751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/501,499

Applicant(s)

BATCHELOR ET AL.

Examiner

Amina Khan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to applicant's amendments filed on October 18, 2006.
2. Claims 1,3-11 are pending. Claim 2 has been cancelled. Claim 1 has been amended.
3. All prior rejections are withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,3,4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (US 5,510,004).

Allen teaches paper containing azetidinium halide polymers comprising monomers such as dimethylaminoethylmethacrylate, diallylamine and hydroxyethyl methacrylate (column 4, lines 35-45). Allen further teaches that the polymers are applied to paper after sheet formation from 0.1-5wt percent based on the dry weight of the paper pulp (column 5, lines 19-30). Allen further teaches the textile compatible

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carrier of water because the polymers are provided onto paper in the form of an aqueous solution (column 5, lines 1-15).

Allen does not teach all the instantly claimed embodiments in a single example.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

It would have nonetheless been obvious to the skilled artisan to produce the claimed composition, as the reference teaches each of the claimed ingredients within the claimed proportions for the same utility.

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6. Claims 1,3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasuna et al. (US 6,297,319).

Nagasuna et al. teach water absorbing polymer comprising polyethylene glycol mono(meth)acrylate (column 5, lines 35-40), 2-aminomethacrylate (column 9, lines 40-45; column 11, lines 9-12), polyethyleneimine azetidinium salt (column 13, lines 40-45), polyethylene glycol diglycidyl ether (column 7, lines 24-25) and water (column 12, lines 20-30). The composition is coated on diapers for the benefit of water absorbancy.

Nagasuna et al. do not teach all the instantly claimed embodiments in a single example.

It would have been obvious to the skilled artisan to produce the claimed composition, as Nagasuna et al. teach the absorbency benefits provided by each of the claimed ingredients for the production of a water absorbent textile. One of ordinary skill in the art would have been motivated to select these components for optimization of absorbency benefits absent unexpected results.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasuna et al. (US 6,297,319) as applied to the claims above and further in view of Evans (US 5,534,038).

Nagasuna et al. are relied upon as set forth above.

Nagasuna et al. do not teach polymers comprising 1,1,3,3,5,5-hexafluoroisopropyl methacrylate.

Evans teaches adding 1,1,1,3,3,3- hexafluoroisopropyl methacrylate monomers (column 6, lines 35-36) to polymers for the benefit of producing added absorption of water in such products as disposable diapers (column 11, lines 20-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polymers of Nagasuna et al. by incorporating the hexafluoroisopropyl methacrylate monomers as taught by Evans because Evans teaches the added water absorbancy imparted to disposable diapers when these monomers are included in the polymer. It is prima facie obvious to combine the two references, each taught for the same purpose, to yield a third composition for that very purpose. *In re Kerkhoven*, 205 USPQ 1069, *In re Pinten*, 173 USPQ 801, and *In re Susi*, 169 USPQ 423 when ingredients are well known and combined for their known properties, the combination is obvious absent unexpected results. A person of ordinary skill in the absorbent article art would expect combinations of these materials to behave in the same fashion as the individual materials, absent unexpected results.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AK

Amina Khan, PhD
December 20, 2006

Lorna M. Douyon

**LORNA M. DOUYON
PRIMARY EXAMINER**